

**APPENDIX B**  
**PENDING CLAIMS**

- 1                   1.       (As filed) A method of treating a neoplasia in a mammal, said  
2 method comprising administering to said mammal a serum-stable nucleic acid-lipid  
3 particle comprising a nucleic acid portion that is fully encapsulated within the lipid  
4 portion, wherein said administration is by injection at an injection site that is distal to said  
5 neoplasia in said mammal.
- 1                   2.       (As filed) A method of treating a neoplasia in a mammal in  
2 accordance with claim 1, wherein said nucleic acid comprises an expressible gene.
- 1                   3.       (As filed) A method of treating a neoplasia in a mammal in  
2 accordance with claim 2, wherein said expressible gene encodes a member selected from  
3 the group consisting of therapeutic polypeptides and therapeutic polynucleotides.
- 1                   4.       (As filed) A method of treating a neoplasia in a mammal in  
2 accordance with claim 2, wherein said gene is exogenous.
- 1                   5.       (As filed) A method of treating a neoplasia in a mammal in  
2 accordance with claim 3, wherein said gene is a member selected from the group  
3 consisting of genes encoding suicide enzymes, toxins and ribozymes.
- 1                   6.       (As filed) A method of treating a neoplasia in a mammal in  
2 accordance with claim 2, wherein said gene encodes a member selected from the group  
3 consisting of herpes simplex virus thymidine kinase (HSV-TK), cytosine deaminase,  
4 xanthine-guaninephosphoribosyl transferase, purine nucleoside phosphorylase,  
5 cytochrome P450 2B1 and analogs thereof.
- 1                   7.       (As filed) A method of treating a neoplasia in a mammal in  
2 accordance with claim 2, wherein said gene is homologous.

1                   8.       (As filed) A method of treating a neoplasia in a mammal in  
2   accordance with claim 2, wherein said gene encodes a member selected from the group  
3   consisting of proto-oncogenes, cytokines, immune stimulatory proteins and anti-  
4   angiogenic proteins.

1                   9.       (As filed) A method of treating a neoplasia in a mammal in  
2   accordance with claim 2, wherein said gene is a member selected from the group  
3   consisting of IL-2, IL-12, IL-15 and GM-CSF.

1                   10.      (As filed) A method of treating a neoplasia in a mammal in  
2   accordance with claim 2, wherein a therapeutically effective amount of said gene is  
3   generated at said neoplasia.

1                   11.      (As filed) A method of treating a neoplasia in a mammal in  
2   accordance with claim 1, wherein said nucleic acid-lipid particle comprises a  
3   protonatable lipid having a pKa in the range of about 4 to about 11.

1                   12.      (As filed) A method of treating a neoplasia in a mammal in  
2   accordance with claim 11, wherein said protonatable lipid is a member selected from the  
3   group consisting of DODAC, DODAP, DODMA, DOTAP, DOTMA, DC-Chol, DMRIE,  
4   DSDAC and mixtures thereof.

1                   13.      (As filed) A method of treating a neoplasia in a mammal in  
2   accordance with claim 1, wherein said nucleic acid-lipid particle comprises a lipid  
3   conjugate that prevents aggregation during formulation.

1                   14.      (As filed) A method of treating a neoplasia in a mammal in  
2   accordance with claim 13, wherein said lipid conjugate is a member selected from the  
3   group consisting of PEG-lipids and PAO-lipids.

1                   15.     (As filed) A method of treating a neoplasia in a mammal in  
2     accordance with claim 13, wherein said lipid conjugate is reversibly associated with an  
3     outer lipid monolayer, and wherein said lipid conjugate exchanges out of said outer lipid  
4     monolayer at a rate faster than PEG-CerC20.

1                   16.     (As filed) A method of treating a neoplasia in a mammal in  
2     accordance with claim 1, wherein said nucleic acid-lipid particle is substantially devoid  
3     of detergents and organic solvents.

1                   17.     (As filed) A method of treating a neoplasia in a mammal in  
2     accordance with claim 1, wherein a therapeutically effective amount of said nucleic acid-  
3     lipid particle accumulates at said neoplasia.

1                   18.     (As filed) A method of treating a neoplasia in a mammal in  
2     accordance with claim 1, wherein a therapeutic effect is detected at the site of said  
3     neoplasia.

1                   19.     (As filed) A method of treating a neoplasia in a mammal in  
2     accordance with claim 17, wherein said therapeutically effective amount comprises  
3     greater than about 0.5% of an administered dose.

1                   20.     (As filed) A method of treating a neoplasia in a mammal in  
2     accordance with claim 1, wherein said nucleic acid-lipid particle has a diameter of about  
3     50 nm to about 200 nm.

1                   21.     (As filed) A method of treating a neoplasia in a mammal in  
2     accordance with claim 20, wherein said nucleic acid-lipid particle has a diameter of about  
3     60 nm to about 130 nm.

1                   22.     (As filed) A method of treating a neoplasia in a mammal in  
2     accordance with claim 20, wherein said nucleic acid-lipid particles are of a uniform size.

1                   23.     (As filed) A method of treating a neoplasia in a mammal in  
2     accordance with claim 1, wherein said nucleic acid-lipid particle has a nucleic acid to  
3     lipid ratio of greater than about 3 mg nucleic acid to mmole of lipid.

1                   24.     (As filed) A method of treating a neoplasia in a mammal in  
2     accordance with claim 23, wherein said particle has a nucleic acid to lipid ratio of greater  
3     than about 14 mg nucleic acid to mmole of lipid.

1                   25.     (As filed) A method of treating a neoplasia in a mammal in  
2     accordance with claim 23, wherein said particle has a nucleic acid to lipid ratio of greater  
3     than about 25 mg nucleic acid to mmole of lipid.

1                   26.     (As filed) A method of treating a neoplasia in a mammal in  
2     accordance with claim 1, wherein said nucleic acid remains at least 90% intact when said  
3     particle containing about 1 µg DNA is treated with about 100 U DNase 1 in digestion  
4     buffer at 37°C for 30 min.

1                   28.     (As filed) A method of treating a neoplasia in a mammal in  
2     accordance with claim 1, wherein said administering is performed at least once per eight  
3     weeks.

1                   35.     (New) A method of treating a neoplasia in a mammal, in  
2     accordance with claim 5, wherein said gene encodes a suicide enzyme.

1                   36.     (New) A method of treating neoplasia in a mammal in accordance  
2     with claim 35, further comprising administering a prodrug.

1                   37.     (New) A method of treating a neoplasia in a mammal in  
2     accordance with claim 36, wherein said prodrug is administered after the serum stable  
3     nucleic acid-lipid particle.

1                   38.     (New) A method of treating a neoplasia in a mammal in  
2     accordance with claim 36, wherein said prodrug is administered before the serum stable  
3     nucleic acid-lipid particle.

1                   39.     (New) A method of treating a neoplasia in a mammal in  
2     accordance with claim 9, further comprising administering a chemotherapeutic agent.

1                   40.     (New) A method of treating a neoplasia in a mammal in  
2     accordance with claim 39, wherein the chemotherapeutic agent is administered after the  
3     serum stable nucleic acid-lipid particle.

1                   41.     (New) A method of treating a neoplasia in a mammal in  
2     accordance with claim 39, wherein the chemotherapeutic agent is administered before the  
3     serum stable nucleic acid-lipid particle.